



**Australian  
Competition &  
Consumer  
Commission**

# **UNCONDITIONED LOCAL LOOP SERVICE**

***An ACCC Discussion Paper* examining possible variation of the service  
declaration for the unconditioned local loop service**

May 2007

# 1. Introduction

The Australian Competition and Consumer Commission (the Commission) has decided to hold a public inquiry under subsection 152AL of the *Trade Practices Act 1974* (the Act) to determine whether it should vary its service declaration for the unconditioned local loop service (ULLS). In particular, the focus of the inquiry is on whether to vary the service description so that a ‘potential point of interconnection’ need not be located at or associated with a customer access module (CAM). In line with encouraging a more technically neutral service description, the Commission will also consider whether the definition of communications wire in the ULLS declaration should be amended to include copper and other metallic based wires used in local loops.

Access to the ULLS involves access to unconditioned cable such as twisted copper pairs in the customer access network. It is a service for the use of the full frequency spectrum over the copper based communications wire between the boundary of a telecommunications network (on the customer side) and a point where the copper terminates.

With this service, there is no prescribed bandwidth because the access seeker receives the use of the twisted copper pair without conditioning or specific carriage technology. This enables the access seeker to add its own carriage technology in order to supply, for example, high speed data carriage services to end-users or, alternatively, multiple telephony services to medium and large corporate customers or a combination of voice and data services.

The declaration means that a carrier supplying the ULLS to itself or another person must also supply the service, upon request, to an access seeker. Declaration ensures service providers have access to the inputs they need to supply competitive communications services to end-users and in accordance with the standard access obligations in s. 152AR of the Act. The terms and conditions of supply can be agreed through commercial negotiations. If the access provider or access seeker cannot agree on the terms and conditions of supply, either party can seek Commission arbitration of the terms and conditions for supply of the (regulated) service. Where a relevant access undertaking (approved by the Commission) exists, an arbitration determination made by the Commission must not be inconsistent with that undertaking.

## 1.1. Purpose

In mid-March 2007, the Commission received a request from the G9 consortium of companies to vary the ULLS service declaration to ensure that sub-loop access falls within the definition of the declared ULLS. It was argued that a variation would provide certainty for a FTTN provider as the provision of services over the network would be contingent on access to the sub-loop.

The Commission's decision to hold a public inquiry into variation of the ULLS now, rather than wait until the broader fixed services review of 2008<sup>1</sup> is based, in part, on the public debate currently surrounding the appropriate fibre-based network to deploy in Australia and the likelihood that funding decisions (both private and government) for the deployment of such networks will be made prior to the 2008 review of the ULLS declaration. The Commission accepts that the issue of whether access to the sub-loop is regulated is likely to provide some certainty for parties making funding decisions in relation to these future fibre-deployments.

After receiving and considering submissions to this inquiry, the Commission will make preliminary decisions about the ULLS description, if any. If a draft inquiry report is issued, a draft variation to the service description will be included, on which further submissions will be sought.

The purpose of this Discussion Paper is to:

- identify the issues which, in the Commission's opinion, are relevant to the decision whether to vary the declared service as it relates to potential points of interconnection; and
- set out background material about, and discussion of, those issues which the Commission thinks should be considered in a public process, and which the Commission seeks comment from industry participants, other stakeholders (including end-users) and from the public more generally.

## 1.2 Background

In June 2006, the Commission released a Position Paper (June 2006 position paper) on a range of issues relating to the future regulation of fixed network services. In that position paper, the Commission decided to continue the regulation of the ULLS (among other things) from 1 August 2006. The June 2006 position paper also outlined the Commission's preliminary views on the forward-looking strategy that it would apply to the regulation of fixed-line services under Part XIC of the Act; and the circumstances under which regulation would be adjusted to reflect changing market conditions.

In addition, the Commission indicated that it intended to maintain a close watch on the competitive influence of infrastructure deployed by Telstra's competitors. In particular, the Commission indicated its intention to undertake an 'infrastructure audit'. In March 2007, the Commission released a proposed record-keeping-rule for the future collection of telecommunications infrastructure from market participants. In effect, this represents a first step in systematically collating the necessary empirical information to assist a robust examination of the appropriate geographic dimension of fixed-line service markets.

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<sup>1</sup> On 17 April 2007, the Commission released the *Fixed Services Review: A second position paper* outlining a framework for the review of existing regulation, and which proposed to commence a holistic review of all relevant fixed services by mid-2008.

The Commission recently released a second Fixed Services Review Position Paper (April 2007 second position paper) which further outlines the Commission's approach towards the review of existing service declarations. More broadly, this paper signals the principles which the Commission will apply to forward-looking regulation of fixed-line services. In this paper, the Commission proposed commencing a holistic review of all fixed-line service declarations (including the ULLS) in mid-2008.

The rest of this report is set out as follows:

- **Section Two** outlines the timetable and process for the public inquiry.
- **Section Three** discusses the current service declaration, together with the proposed variation.
- **Section Four** sets out some key issues that submissions should address in responding to this Discussion Paper.
- **Appendix 1** sets out the legislative background to the access regime that submissions should address when responding to this Discussion Paper.

## **2. Timetable and process for the public inquiry**

Under the *Telecommunications Act 1997*, the Commission must provide a reasonable opportunity for any member of the public to make a written submission to a public inquiry. The Commission considers that five weeks represents a reasonable opportunity for the return of written submissions to this inquiry. Accordingly, the Commission requests written submissions by **15 June 2007**. It has been the Commission's experience that submissions have not always addressed the issues identified in the Discussion Paper. Persons considering making a submission to the inquiry may consider discussing their proposed submission with the Commission at an early opportunity, to facilitate the provision of relevant information that meets the Commission's needs in the inquiry.

The Commission expects that it will publish a draft report setting out its preliminary findings by late July 2007. The Commission will then provide an opportunity to comment on the draft report prior to finalising the inquiry report.

In the event that the Commission is satisfied that it would be in the long-term interests of end-users (LTIE) to vary the service declaration for the ULLS, that variation will be made shortly after the release of the report.

Further detail of the Commission's approach to declaration inquiries is outlined in its *Telecommunications services – Declaration provisions – a guide to the declaration provisions of Part XIC of the Trade Practices Act, July 1999* (the Declaration Guidelines).

### **2.1. Making submissions to the public inquiry**

The Commission seeks comment from all industry participants, other stakeholders and from the public more generally. It encourages parties to consider the matters set out in this Discussion Paper, and make submissions to the Commission to assist it in determining whether to vary the ULLS declaration.

To foster an informed and robust consultative process, the Commission proposes to treat all submissions as non-confidential, unless the submissions indicate otherwise.<sup>2</sup>

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<sup>2</sup> Unless the author requests that a submission be kept confidential, written submissions given to the Commission will be made available to interested parties upon request and will be published on the Commission's website at [www.accc.gov.au](http://www.accc.gov.au). If submissions contain confidential information, the author should provide the Commission with a 'confidential' and 'public' version. Only the 'public' version will be placed on the Commission's website.

Submissions can be addressed to:

Nicole Hardy  
Director  
Compliance and Regulatory Operations  
Communications Group  
Australian Competition and Consumer Commission  
GPO Box 520  
Melbourne VIC 3001

In addition to a hard copy, parties making submissions are encouraged to provide an electronic copy of the submission to [nicole.hardy@acc.gov.au](mailto:nicole.hardy@acc.gov.au).

### 3. Unconditioned local loop service

#### 3.1. The current service description

The ULLS was declared by the Commission in July 1999. Box 1 sets out the current ULLS description. More generally, the service involves access to unconditioned cable such as twisted copper pairs in the customer access network. It is described as a service for the use of copper-based communications wire between the boundary of a telecommunications network (on the customers' side) and a point where the copper terminates.

##### Box 1: The current unconditioned local loop service description

###### The current ULLS description

The unconditioned local loop service is the use of unconditioned communications wire between the boundary of a telecommunications network at an end-user's premises and a point on a telecommunications network that is a potential point of interconnection located at or associated with a customer access module and located on the end-user side of the customer access module.

###### Definitions

Where words or phrases used in this declaration are defined in the *Trade Practices Act 1974* or the *Telecommunications Act 1997*, they have the meaning given in the relevant Act.

**boundary of a telecommunications network** is the point ascertained in accordance with section 22 of the *Telecommunications Act 1997*;

**communications wire** is a copper based wire forming part of a public switched telephone network;

**customer access module** is a device that provides ring tone, ring current and battery feed to customers' equipment. Examples are Remote Subscriber Stages, Remote Subscriber Units, Integrated Remote Integrated Multiplexers, Non-integrated Remote Integrated Multiplexers and the customer line module of a Local Access Switch;

**public switched telephone network** is a telephone network accessible by the public providing switching and transmission facilities utilising analogue and digital technologies.

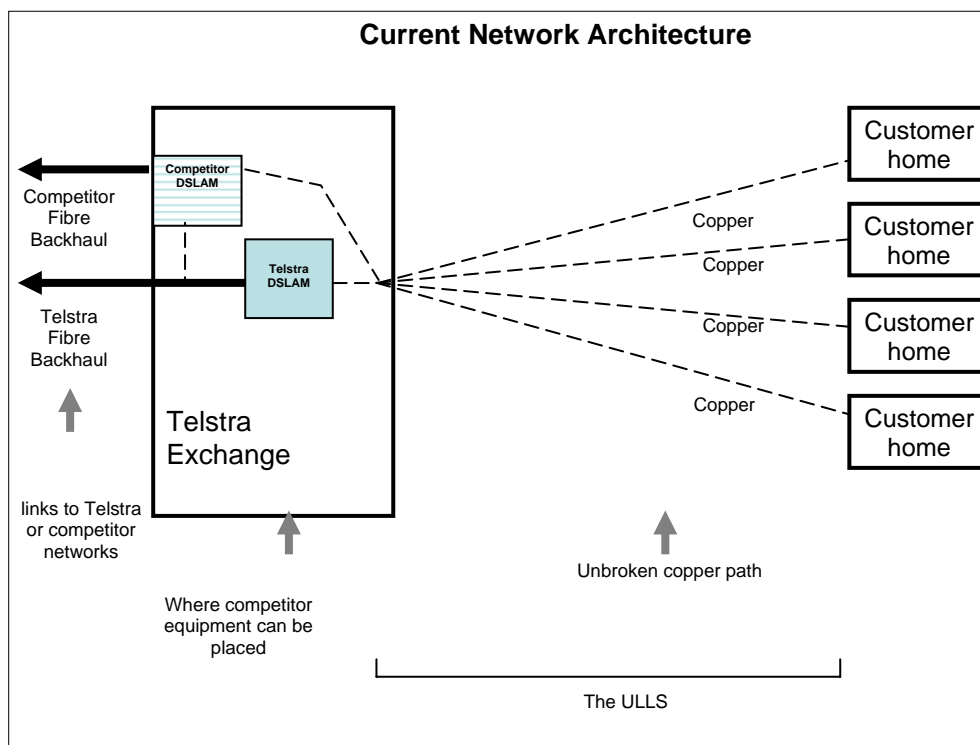
With this service there is no prescribed bandwidth. This is because the access seeker is receiving the use of the twisted copper pair without conditioning or specific carriage technology. This enables the access seeker to add its own carriage technology in order to differentiate the services it supplies to its customers. For example, access seekers may use the ULLS and their own technology to supply high speed data carriage services to end-users or, alternatively, multiple telephony services to medium and large corporate customers or a combination of both voice and data services.

The key reason access seekers request direct access to the customer access network is to use xDSL carriage technology. This technology enables access seekers to provide end-users with high bandwidth carriage services. xDSL technologies have been specifically designed for use on copper networks as opposed to (say) optical fibre networks which, traditionally, have not

been subject to the same bandwidth limitations as copper networks.

As such, the ULLS is used as an input by access seekers as a component for the supply of high bandwidth end-to-end services for the carriage of voice or data communications or both. Access seekers attach electronic equipment to the line (e.g. HDSL or ADSL modems) in order to supply these downstream services to end-users.

One example of how such a service could be provided involves co-location of the access seeker's equipment with Telstra's customer access module. This would involve establishing a connection (i.e. a 'jumper') between the point at which the copper cable is terminated (i.e. the main distribution frame) and the service provider's 'card' in the co-located facility. The card contains a number of ports (e.g. 12 or 24 ports — one for each copper pair) and provides the electronic circuitry for the relevant carriage technology (e.g. ADSL, SHDSL). The service provider would run or lease a transmission link from the card (co-located facility) to its own core network. Diagram 1 illustrates how this process would work.



**Diagram 1: Use of ULLS**

Telstra is the predominant supplier of this service by virtue of its ownership of a copper customer access network located throughout Australia. While new networks are being rolled-out in particular areas, they tend to involve the use of different transmission media, namely optical fibre, coaxial cable, and wireless technology.

### **3.2. The proposed variation**

The Commission has been asked to vary the ULLS description to ensure access to the sub-



loop is regulated. Sub-loop access refers to access at a new point along the communications wire – that is, access to part of the local copper loop (rather than the full local loop). This new location may be at a device such as a node.

Specifically, the Commission has been asked to vary the service description of the ULLS so that:

- access to the ULLS continues to be available at current locations even if an infrastructure owner deploys fibre out to a remote point such as a node; and
- access to the communications wire is available at all potential points of interconnection along the local loop, even if these points do not use devices, such as a CAM.

The specific variations to the current ULLS declaration appear ‘marked up’ in Box 2 below.

**Box 2: The proposed ULLS variation**

<p><b>Service description</b></p> <p><del>The</del> <u>An</u> unconditioned local loop service is the use of unconditioned communications wire between the boundary of a telecommunications network at an end-user’s premises and a point on a telecommunications network that is a potential point of interconnection located at or associated with:</p> <p><u>(a) a customer access module;</u></p> <p><u>(b) a junction or concentration point for two or more communications wires; or</u></p> <p><u>(c) any other physically accessible point of interconnection on a communications wire or any section of it.</u></p> <p><u>For the avoidance of doubt a request by an access seeker for access at one point of interconnection on a communications wire is not satisfied by the provision of access at another point of interconnection on that communications wire, and located on the end-user side of the customer access module.</u></p> <p><b>Definitions</b></p> <p>Where words or phrases used in this declaration are defined in the <i>Trade Practices Act 1974</i> or the <i>Telecommunications Act 1997</i>, they have the meaning given in the relevant Act.</p> <p><b>boundary of a telecommunications network</b> is the point ascertained in accordance with section 22 of the <i>Telecommunications Act 1997</i>;</p> <p><b>communications wire</b> is a <del>copper</del> <u>metallic</u> based wire forming part of a public switched telephone network;</p> <p><b>customer access module</b> is a device that provides ring tone, ring current <del>and</del> <u>or</u> battery feed to customers’ equipment <u>or facilitates the provision of a listed carriage service over a communications wire</u>. Examples are Remote Subscriber Stages, Remote Subscriber Units, Integrated Remote Integrated Multiplexers, Non-integrated Remote Integrated Multiplexers, <del>and</del> the customer line module of a Local Access Switch <u>and a Digital Subscriber Line Access Multiplexer</u>;</p> <p><b>public switched telephone network</b> is a telephone network accessible by the public providing switching and transmission facilities utilising analogue and digital technologies.</p>
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The Commission has also decided to consider whether the definition of communications wire

in the ULLS declaration should be amended to include copper and other metallic based wires used in local loops.

### **Summary of the relevant issues**

The Commission is required by s 152AL(3)(d) to be satisfied that the making or variation of the declaration will promote the LTIE of carriage services or of services provided by means of carriage services.

Issues the Commission considers important to assist in making its decision as to whether variation of the ULLS is in the LTIE include:

- whether the ULLS description currently requires access to be provided to the communications wire at a point that is not located and/or associated with a CAM, such as a node or other device
- the extent of demand (included anticipated demand) for access to the communications wire at locations not at the CAM
- to what extent the deployment of a fibre-based network would affect the ability of access seekers to compete in downstream markets
  - the effect of the proposed ULLS variation on this ability to compete?
- whether the varied ULLS is currently being supplied (either pursuant to the current ULLS declaration or under commercial arrangements) or would be technically capable of being supplied should it be declared
  - whether the provision of services from the exchange would be affected if access is also granted at other points along the communications wire
- how the proposed variation would affect the legitimate commercial interests of an access provider
  - how these interests could be protected

Other issues parties may wish to raise in submissions include:

- whether the Commission should consider declaring a new service rather than varying the ULLS declaration (and the timing of any such declaration review); and
- whether any transitional arrangements are needed to ensure access seekers and access providers smoothly transition to fibre-based network(s).

These issues are discussed in more detail in the rest of this report.

## 4. Matters submissions should address

The Commission will decide whether to vary the declaration after having regard to the legislative criteria in s. 152AB of the Act (discussed in the Appendix 1 to this Discussion Paper). Submissions should, therefore, address the legislative criteria, where possible, in responding to this Discussion Paper. Below are more specific issues that the Commission considers may be pertinent to deciding whether varying the ULLS service description will promote the LTIE.

### 4.1. Extent of current service description

As noted above, the current ULLS description refers to the use of the communications wire between an end user's premises and a 'potential point of interconnection *located at or associated with a customer access module*'. A customer access module (CAM) is defined as a device that provides ring tone, ring current and battery feed to customer equipment.

Currently, ULLS interconnection is generally requested and provided at the location of Telstra's CAM, usually located at the Telstra exchange. In other words, access seekers generally install their own CAM at the same location as the Telstra CAM. Therefore, it is currently not necessary to determine whether interconnect at all other points on the communications wire falls within the current ULLS service description.

In addition to interconnection at the exchange, access seekers have the right to access the communications wire at a Remote Access Unit (RAU) — IRIM, CMUX and RSU (also defined as types of CAMs) — which are smaller units than a local access switch at an exchange, and also located closer to the end-users' premises.

However, there may be some uncertainty as to whether a device such as a pillar or cabinet is 'associated with' a CAM. The Commission understands that a pillar or cabinet does not provide ring tone, ring current and battery feed. Therefore, it cannot be defined as a CAM. These are also typically not 'located at' a CAM. However, if a pillar or cabinet is 'associated with' a CAM, then an access provider could have an obligation to provide access to the communication wire at these locations.

#### *Questions to assist those preparing submissions:*

- Do you consider that a pillar, node or other remote device is 'associated with a CAM', within the meaning of the current ULLS service description? Please provide reasons.
- Do you consider that there is sufficient certainty around this issue? If no, what do you consider should be done to overcome this uncertainty?

### 4.2. Demand for the ULLS and sub-loop access

As noted in Chapter 3, the key reason to date for access seekers requesting direct access to the customer access network is to use xDSL carriage technology. This technology enables

access seekers to provide end-users with high bandwidth carriage services. xDSL technologies have been specifically designed for use on copper networks as opposed to (say) optical fibre networks which, traditionally, have not been subject to the same bandwidth limitations as copper networks.

As such, the ULLS is used by access seekers as a component for the supply of high bandwidth end-to-end services for the carriage of voice or data communications or both. Access seekers attach electronic equipment to the line (e.g. HDSL or ADSL modems) in order to supply these services to end-users.

The ULLS is used as an input to provide services in a number of downstream or dependent markets. The Commission has previously defined a number of relevant markets for the ULLS<sup>3</sup>. These are the:

- customer access market for the supply of customer access services by service providers to themselves and other service providers;
- long-distance telephony market;
- mobile telephony market;
- the local call market; and
- the high bandwidth carriage services market for the supply of high bandwidth carriage services by service providers to end-users.

The Commission is not aware of circumstances in which access to the communications wire has been sought from any location that is not the location of a Telstra CAM.

However, it is aware that although access is regulated pursuant to the current ULLS declaration some access seekers have had difficulty obtaining access to Remote Access Units (RAUs) (specifically, RIMs) that Telstra has installed in some distribution areas. The Commission also understands that Telstra has also installed fibre in some parts of the network as part of its network modernisation activities.

***Questions to assist those preparing submissions:***

- To what extent have access seekers sought to access the ULLS at RIM cabinets and other remote access units?
- Have you experienced difficulties in accessing RIMs or other RAUs? Please outline the nature of these difficulties. If there are commercial in confidence issues involved, provide a general discussion, if possible.
- Have you sought access to the sub-loop? What were the terms of access, if any?
- Do you plan to seek access to the sub-loop in the future? In what circumstances (if any) will you seek access to the sub-loop?

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<sup>3</sup> Refer to ACCC Declaration of Local Telecommunication Services, December 1998 and ACCC Inquiry into domestic intercarrier roaming declaration, March 1998.

- To what extent would the deployment of a fibre-based network affect the ability of access seekers to compete in downstream markets?
- How will deployment of a fibre-based network affect demand for the ULLS/or the sub-loop?

### 4.3. The supply of sub-loop access

Section 152AL of the TPA provides that the Commission may declare a service if it is an eligible service that is supplied or capable of being supplied by a carriage service provider, either to itself or other persons.

The Commission notes that the ULLS as currently declared is currently being supplied.

However, there is some question as to whether access to the sub-loop is, firstly, being supplied or, second, is capable of being supplied.

While the question of whether sub-loop access is being supplied is a matter for factual inquiry, the issue of whether it is capable of being supplied requires information relevant to the technical feasibility of supplying and charging for the proposed service.

There are two broad concerns with the technical feasibility of sub-loop access:

- whether it is possible for access seekers to interconnect at the node; and
- whether it is possible for access to the communications wire to be provided at different points at the same time, not on the same pair ('multiple feed' situation).

The first issue is relevant to both a multiple feed and a single feed situation (discussed below). The single feed situation is when DSLAMs must be located at the new location because the communication wire between the exchange and new location has been replaced with optical fibre. There are likely to be a number of technical issues to overcome to provide sub-loop access. The Commission notes that in the 2006 proposal, *A competitive model for national broadband upgrade*, it is stated:<sup>4</sup>

The first technical reason [for difficulties with access] is that the 'node' – the cabinet which sits in the street and serves about 200 homes – is too small for competitors to install their own electronic equipment....

The second reason is that it would be pointless for competitors to build their nodes next to Telstra's nodes – as there will be no way for the competitors to interconnect with the copper wires which will run from the node to customer's homes....

The second issue is relevant because the proposed variation would require that even if an access provider moves its DSLAMS from an exchange building location to new location

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<sup>4</sup> Allen Consulting Group, dandolo partners 2006, *A competitive model for national broadband upgrade*, 10 July, p. 28 and 30, see <http://www.allenconsult.com.au/publications/view.php?id=305>.

closer to the customer, such as a node, it will still be obliged to provide access at the exchange in the same distribution area (that is, provide ‘multiple feeds’).

This raises a question as to whether this scenario would impose significant performance constraints. The differing signal levels from the connection at the exchange and another location to the same distribution area may result in significantly increased cross talk. In particular, connection at the node may adversely affect the provision of services from communication wires interconnecting at the exchange. Therefore, customers that might previously have been served from the exchange might not be able to gain access from that location any more, or potentially have their data rates significantly reduced. Therefore, while it might be technically possible for different points on the communications wire to be accessed at the same time, a question arises as to whether the technical competitiveness of the provision of services served from the exchange is likely to be severely compromised.

***Questions to assist those preparing submissions:***

- Is sub-loop access currently being provided by Telstra and/or other access providers? On what basis?
- Is it technically feasible to connect to the local loop at a RAU such as a node? How? Are there any technical impediments?
- Is it possible for access to be provided at the exchange at the same time as access further along the communications cable at a RAU? Does this affect the quality of services supplied from either point? In what way (if any)? How can this be overcome?
- How would provision of access at multiple points on the communications cable affect the legitimate commercial interests of an access provider? How could these interests be protected?
- How will deployment of a fibre-based or IP-based network to locations beyond the exchange (eg. the node) affect access seeker’s ability to use their current equipment? Does this depend upon whether access is regulated at multiple points along the communications cable? In what way (if any)?
- How will deployment of a fibre-based or IP-based network to locations beyond the exchange affect investment plans of industry participants?
- What has been the overseas experience in sub-loop access?

# Appendix 1: Legislative background

## Part XIC access regime

Part XIC of the Act sets out a telecommunications access regime. The Commission may determine that particular carriage services and related services are declared services. This would be where declaration is in the long-term interests of end-users (LTIE). Once a service is declared, carriers and carriage service providers (CSPs) are required to comply with standard access obligations in relation to any such service that they supply. The standard access obligations facilitate the provision of access to declared services so that service providers can provide carriage services and/or content services. In addition to its standard access obligations, a carrier, CSP or related body must not prevent or hinder access to a declared service.

The LTIE criterion is also applicable to any decision by the Commission to provide an exemption from existing access obligations to a service that is either currently declared (s.152AT) or an anticipatory exemption to a future service or a service that is not currently declared (s.152ATA).

Following a request by any person or on its own initiative, the Commission may hold a public inquiry into whether to declare a new service, revoke a declaration, or vary the definition of a service that is already declared. Unless the variation is of a minor nature under the Procedural Rules or the service is of minor importance, this can only be made after the Commission has first held a public inquiry. The purpose of the inquiry is to assist the Commission to determine whether it is satisfied that declaring, varying or revoking a particular service would promote the LTIE of carriage services and services provided by means of carriage services.

In this regard, the Commission must:

- hold a public inquiry in accordance with Part 25 of the *Telecommunications Act 1997* on whether to make the proposed declaration variation or revocation of a declaration;
- prepare and publish a report setting out the Commission's findings as a result of that public inquiry; and
- be satisfied that varying, or revoking, the service declaration or declaring the service will promote the LTIE of carriage services or of services provided by means of carriage services.

The variation, revocation or declaration must be made within 180 days of the publication of the report.

Details of the timetable and process for the public inquiry are outlined in section 2 of this Discussion Paper.

### **The Commission's approach to the LTIE test**

The Commission must decide whether declaring or varying a service would promote the

LTIE of carriage services, or of services supplied using carriage services ('listed services').

Section 152AB of the Act provides that, in determining whether declaration promotes the LTIE, regard must be had to the extent that declaration is likely to result in the achievement of the following objectives:

- promoting competition in a market for listed services;
- achieving any-to-any connectivity in relation to carriage services that involve communications between end-users; and
- encouraging economically efficient use of, and the economically efficient investment in, the infrastructure by which telecommunications services are supplied and the economically efficient use of and investment in other types of infrastructure by which services are capable or likely to be supplied.

The following discussion of the LTIE criteria is mainly in terms of how it may be used to determine whether declaration should be made. However, the basic principles underlying the relevant market and efficiency analysis also apply to decisions about exemptions, variation and revocations of declarations.

### ***Promoting competition***

Subsections 152AB(4) and (5) provide that, in interpreting this objective, regard must be had to, but is not limited to, the extent to which the arrangements will remove obstacles to end-users gaining access to listed services. The Explanatory Memorandum to Part XIC of the Act states that:

...it is intended that particular regard be had to the extent to which the ... [declaration]... would enable end-users to gain access to an increased range or choice of services.<sup>5</sup>

The first criterion requires the Commission to make an assessment of whether or not declaration would be likely to promote competition in the markets for listed services.

The concept of competition is of fundamental importance to the Act and has been discussed many times in connection with the operation of Part IIIA, Part IV, Part XIB and Part XIC of the Act.

In general terms, competition is the process of rivalry between firms, where each market participant is constrained in its price and output decisions by the activity of other market participants. The Trade Practices Tribunal (now the Australian Competition Tribunal) stated that:

In our view effective competition requires both that prices should be flexible, reflecting the forces of demand and supply, and that there should be independent rivalry in all dimensions of the price-product-service packages offered to consumers and customers.<sup>6</sup>

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<sup>5</sup> *Trade Practices Amendment (Telecommunications) Act 1997* (Cth) explanatory memorandum.



Competition is a process rather than a situation. Nevertheless, whether firms compete is very much a matter of the structure of the markets in which they operate.

Competition can provide benefits to end-users including lower prices, better quality and a better range of services over time. Competition may be inhibited where the structure of the market gives rise to market power. Market power is the ability of a firm or firms to profitably constrain or manipulate the supply of products from the levels and quality that would be observed in a competitive market for a significant period of time.

The establishment of a right for third parties to negotiate access to certain services on reasonable terms and conditions can operate to constrain the use of market power that could be derived from the control of these services. Accordingly, an access regime such as Part IIIA or Part XIC addresses the *structure* of a market, to limit or reduce the sources of market power and consequent anti-competitive conduct, rather than directly regulating conduct which may flow from its use, which is the role of Parts IV and XIB of the Act. Nonetheless, in any given challenge to competition, both Parts XIB (or IV) and XIC may be necessary to address anti-competitive behaviour.

To assist in determining the impact of potential declaration on downstream markets, the Commission will first need to identify the relevant market(s) and assess the likely effect of declaration on competition in each market.

Section 4E of the Act provides that the term 'market' includes a market for the goods or services under consideration and any other goods or services that are substitutable for, or otherwise competitive with, those goods or services. The Commission's approach to market definition is discussed in its *Merger Guidelines*, June 1999 and is also canvassed in its information paper, *Anti-competitive conduct in telecommunications markets*, August 1999.

The second step is to assess the likely effect of declaration on competition in each relevant market. As noted above, subsection 152AB(4) requires that regard must be had to the extent to which declaration will remove obstacles to end-users gaining access to listed services.

The Commission considers that denial to service providers of access to necessary upstream services on reasonable terms is a significant obstacle to end-users gaining access to services. Declaration can remove such obstacles by facilitating entry by competitive service providers, thereby providing end-users with additional services from which to choose

Where existing market conditions already provide for the competitive supply of services, the access regime should not impose regulated access.<sup>7</sup> This recognises the costs of providing access, such as administration and compliance, as well as potential disincentives to investment. Regulation will only be desirable where it leads to benefits that outweigh any costs of regulation in terms of lower prices, better services or improved service quality for end-users.

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<sup>6</sup> *Re Queensland Co-operative Milling Association Ltd; Re Defiance Holdings Ltd* (1976) ATPR 40-012, 17,245.

<sup>7</sup> *Trade Practices Amendment (Telecommunications) Act 1997* (Cth) explanatory memorandum.

In the context of considering whether declaration will promote competition, it is therefore appropriate to examine the impact of the described service on each relevant market, and compare the state of competition in that market before and after the proposed declaration. In examining the market structure, the Commission considers that competition is promoted when market structures are altered such that the exercise of market power becomes more difficult; for example, because barriers to entry have been lowered (permitting more efficient competitors to enter a market and thereby constrain the pricing behaviour of the incumbents) or because the ability of firms to raise rivals' costs is restricted.

### ***Any-to-any connectivity***

Subsection 152AB(8) provides that the objective of any-to-any connectivity is achieved if, and only if, each end-user who is supplied with a carriage service that involves communication between end-users is able to communicate, by means of that service, or a similar service, with other end-users whether or not they are connected to the same network.

The reference to 'similar' services in the Act enables this objective to apply to services with analogous, but not identical, functional characteristics, such as fixed and mobile voice telephony services or Internet services which may have differing characteristics.

The any-to-any connectivity requirement is particularly relevant when considering services that involve communications between end-users.<sup>8</sup> When considering other types of services (e.g. carriage services that are inputs to an end-to-end service or distribution services such as pay television carriage), the Commission considers that this criterion will be given less weight compared to the other two criteria. However in relation to some services, this criterion can be particularly significant. For example, in relation to some uses of the PSTN OTA services.

### ***Efficient use of, and investment in, infrastructure***

Economic efficiency has three components:

- ***productive efficiency*** refers to the efficient use of resources within each firm such that all goods and services are produced using the least cost combination of inputs
- ***allocative efficiency*** refers to the efficient allocation of resources across the economy such that the goods and services that are produced in the economy are the ones most valued by consumers. It also refers to the distribution of production costs amongst firms within an industry to minimise industry-wide costs
- ***dynamic efficiency*** refers to the efficient deployment of resources between present and future uses such that the welfare of society is maximised over time. Dynamic efficiency incorporates efficiencies flowing from innovation leading to the development of new services, or improvements in production techniques and is predicated on there being appropriate incentives for investment.

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<sup>8</sup> Commonwealth of Australia, *Trade Practices (Telecommunications) Amendment Act 1997* (Cth), explanatory memorandum.

The Commission needs to ensure that the access regime does not discourage investment in networks or network elements where such investment is efficient. However, where it is inefficient to duplicate investment in existing networks or network elements, the access regime may play an important role in ensuring that existing infrastructure is used efficiently.

These matters are interrelated. In many cases, the LTIE may be promoted through the achievement of two or all of these criteria simultaneously. In other cases, the achievement of one of these criteria may involve some trade-off in terms of another of the criterion, and the Commission will need to weigh up the different effects to determine whether declaration promotes the LTIE. In this regard, the Commission will interpret long-term to mean the period of time necessary for the substantive effects of declaration to unfold.

Subsection 152AB(2)(e) states that the Commission must have regard to the objective of encouraging the economically efficient use of, and the economically efficient investment in:

- i. the infrastructure by which listed services are supplied and
- ii. any other infrastructure by which listed services are or are more likely to become, capable of being supplied.

In determining the extent to which this objective is met, the Commission must have regard to:

- whether it is technically feasible for the services to be supplied and charged for, having regard to:
  - the technology that is in use or likely to become available
  - whether the costs that would be involved in supplying, and charging for, the services are reasonable or likely to become reasonable
  - the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks
- the legitimate commercial interests of the supplier or suppliers of the service, including the ability of the supplier or suppliers to exploit economies of scale and scope
- the incentives for investment in:
  - the infrastructure by which the services are supplied; and
  - any other infrastructure by which the services are, or are likely to become, capable of being supplied.